

**IN THE UNITED STATES DESIGNATED/ELECTED OFFICE**

International Application No. : PCT/EP2004/011551  
International Filing Date : 14 October 2004 (14.10.2004)  
Priority Date(s) Claimed : 04 November 2003 (04.11.2003)  
Applicant(s) (DO/EO/US) : Hans-Michael EGGENWEILER, ET AL.

Title: USE OF THIENOPYRIMIDINES

**INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §§ 1.56, 1.97 and 1.98**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This information disclosure statement is made in accordance with 37 C.F.R. §§ 1.56, 1.97 and 1.98 as follows:

**Timing and Fees**

- ☒ Under 37 C.F.R. § 1.97(b), no fee or statement is required for filing this information disclosure statement is filed:
- ☐ within three months of the filing date of a national application other than a CPA under § 1.53(d);
  - ☒ within three months of the actual filing date of the national phase of a PCT application; OR
  - ☐ before the mailing of a first substantive office action (including after filing of an RCE).
- ☐ Under 37 C.F.R. § 1.97(c), this information disclosure statement is filed after the periods specified in 37 C.F.R. § 1.97(b), but before the mailing date of:
- a final rejection under 37 C.F.R. 1.113;
  - termination of prosecution, e.g. Ex Parte Quayle, M.P.E.P § 609(B)(2); OR
  - a notice of allowance under 37 C.F.R. § 1.311; and

is accompanied by:

☐ the statement as specified in 37 C.F.R. § 1.97(e) set out below; OR

☐ a check covering the fee of \$180.00 under 37 C.F.R. § 1.17(p).

☐ Under 37 C.F.R. § 1.97(d), this information disclosure statement is filed after the mailing date of the following actions which have not been withdrawn:

☐ a final action under 37 C.F.R. § 1.113;

☐ termination of prosecution, e.g. Ex Parte Quayle, M.P.E.P. § 609(B)(2);

☐ OR a notice of allowance under 37 C.F.R. § 1.311;

AND is filed on or before payment of the issue fee; AND is accompanied by:

the statement as specified in 37 C.F.R. § 1.97(e) as set forth below, and the fee of \$180.00 under 37 C.F.R. § 1.17(p).

Statements Under 37 C.F.R. 1.97(e)

☐ Each item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application having a mailing date not more than three months prior to the filing date of this information disclosure statement; or

☐ No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and to the knowledge of the undersigned attorney after making reasonable inquiry, no item of information contained in this information disclosure statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing date of the information disclosure statement.

Cited Materials

☐ Copies of materials listed but not attached were cited in benefit (35 U.S.C. § 120) ancestor application Serial No. \_\_\_\_\_, on Form 892 by the Examiner and/or Form 1449 by the applicant; see 37 C.F.R. § 1.98(d).

☒ Copies of materials listed but not attached were cited in an international search report dated February 8, 2005.

☐ Not required by 37 CFR § 1.98.

☐ Copies of the materials listed are attached (except for the foregoing).

### Non-English Language References

☐ An English-language search report or equivalent paper from a foreign patent office is provided indicating the relevance of the cited reference(s).

☒ A foreign-language search report from a foreign patent office is provided, and pertinent parts are translated substantively below:

X = document of particular relevance when it is taken alone

Y = document of particular relevance when it is combined with another such document

A = document defining the general state of the art

O = non-written disclosure

P = intercalated document

T = document cited to understand the theory or principle underlying the invention

E = patent document which has the benefit of a date earlier than the filing date and which was published only on or after this filing date

D = cited in the application

L = cited for another reason

& = publication of member of same patent family

☒ Translation of other relevant information on foreign search report

In the search report, "Seite" means page, "Seiten" means pages, "Verbindungen der Formel" means Figure of formula, "Beispiele" means examples, and "das ganze Dokument" means the entire document, "Spalte" means column, "Zeile" means line, "Abbildungen" means claims, "Anspruch" means example, "Zusammenfassung" means summary, and "Tabelle" means table, and "Tabellen" means tables "in der Anmeldung erwahnt" means cited in the application, "Schema" means scheme, "und" means and, "Absatz" means break, "Abbildung" means figure.

### Other Information

#### Payment of Fees Due (If Any):

☐ A check for \$\_\_\_\_\_ covering the fee identified above is attached.

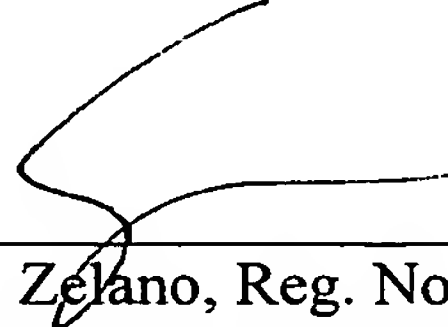
☐ Please charge to Deposit Account No. 13-3402 \$\_\_\_\_\_ for the fee identified above.

10/577908

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☒ The Commissioner is hereby authorized to charge or credit any overpayment to Deposit Account #13-3402, two copies of this paper are attached for this purpose.

Respectfully submitted,



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Attorney Docket No.: MERCK-3159

Date: May 1, 2006

AJZ:ssr

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Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 2

**Complete if Known**

Application Number	USNP of PCT/EP2004/011551
Filing Date	14 October 2004 (14.10.2004)
First Named Inventor	Hans-Michael EGGENWEILER, et al.
Group Art Unit	unknown
Examiner Name	unknown
Attorney Docket Number	MERCK-3159

**U.S. PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code <sup>2</sup> (if known)		
	001	6,133,271	A	PAMUKCU ET AL.	10-17-2000
	002	6,130,223	A	JONAS ET AL.	10-10-2000
	003	5,948,911	A	PAMUKCU ET AL.	09-07-1999
	004	6,482,948	B1	YAMADA ET AL.	11-19-2002
	005	6,110,920	A	ROCHUS ET AL.	08-29-2000

**FOREIGN PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	006	EP	1 167 367	A1	NIPPON SODA CO., LTD.	01-02-2002		004
	007	WO	98/06722	A1	MERCK PATENT GMBH, ET AL.	02-19-1998		005
	008	WO	03/051346	A2	ALTANA PHARMA AG, ET AL.	06-29-2003		
	009	WO	03/035653	A1	NIPPON SODA CO., LTD, ET AL.	05-01-2003		

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached. Number refers to English language corresponding family member.

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<b>Substitute for form 1449A/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		<b>Complete if Known</b>			
		Application Number	USNP of PCT/EP2004/011551		
		Filing Date	14 October 2004 (14.10.2004)		
		First Named Inventor	Hans-Michael EGGENWEILER, et al.		
		Group Art Unit	unknown		
		Examiner Name	unknown		
Sheet	2	of	2	Attorney Docket Number	MERCK-3159

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	010	BOEHM R ET AL: "UEBER THIENO-VERBINDUNGEN 5. MITTEILUNG: BASISCH SUBSTITUIERTE THIENOA2, 3-DUEPYRIMIDINE THIENO COMPOUNDS PART 5: BASICALLY SUBSTITUTED THIENOA2, 3-DUEPYRIMIDINES" PHARMAZIE, VEB VERLAG VOLK UND GESUNDHEIT. BERLIN, DD, Bd. 41, Nr. 1, 1986, Seiten 23-25, XP001203411; ISSN: 0031-7144	
	011	SYBERTZ E ET AL: "INGIBITORS OF PDE1 AND PDE5 CGMP PHOSPODIESTERASES: PATENTS AND THERAPEUTIC POTENTIAL" EXPERT OPINION ON THERAPEUTIC PATENTS, ASHLEY PUBLICATIONS, GB, Bd. 7, Nr. 6, 1997, Seiten 631-639, XP002178692; ISSN: 1354-3776	

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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